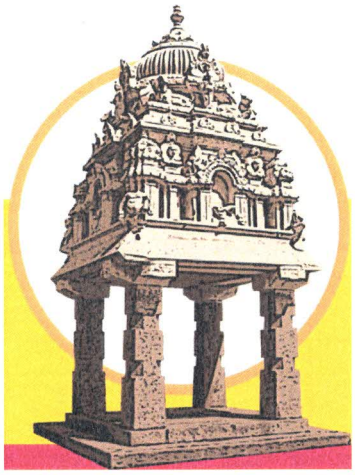
BRUHAT BANGALORE MAHANAGARA PALIKE



NAME OF WORK: IMPROVEMENTS TO ROADS AND DRAINS AT KEMPAPURA NEERU BHAVI MUNIYAPPA LAYOUT , IN WARD NO 07 - BYATARAYANAPURA, KODIGEHALLI SUB DIVISION.

CONSULTANT:

BVH CONSULTING ENGINEERS

 # 41/2, 6TH MAIN ROAD JNANAJYOTHI NAGAR,
MALATHALLI, BANGALORE-560056
PHONE : 9964339888, LANDLINE:08023241948
EMAIL :mbnk2278@yahoo.com

Bruhat Bangalore Mahanagara Palike

BYTARAYANAPURA DIVISION

Job No: 007-16-000043 26618

Name of Agency :- Benaka Developers and projects Pvt. Ltd

Bill No :- 2nd & Part Bill

Name of work: Improvements to Roads and drains at Kempapura Neeru Bhavi Muniyappa Layout , in ward No 07 - Byatarayanapura, Kodigehalli Sub

Sl No	Description of Work	Unit	No.	L	B	D	Qty	Rate	Amount
1	KSRRB M300-1. Earth work excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5m, excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specification. MORTH / Chapter 3 (P.No.142, I.No.19.1 of PW, P&IWTD SR 2016-17)								
	Measurements recorded on:								
	Desilt	**Cum**							
	Neeru Bhavi Muniyappa Layout								
	0-30		2	30.00	0.80	0.70	33.60		
	30-60		2	30.00	0.80	0.70	33.60		
	60-90		2	30.00	0.80	0.70	33.60		
	90-122		2	32.00	0.80	0.70	35.84		
	Culvert		1	7.00	2.00	1.10	15.40		
	over burden earth								
	Ch 0.00 to 30.00		1	24.00	2.10	0.35	17.64		
	Ch 30.00 to 60.00		1	29.00	2.45	0.40	28.42		
					Total Qty Cum		**198.10**	**196.00**	**38827.60**
2	Providing granite Slabs of Selected quality roughly dressed and fixed in cement mortor (1:6) including fixing curing etc,. Complete. 7.5cms thick (P.No.25, I.No.5.31.1 of PW, P&IWTD SR 2016-17)								
	Measurements recorded on:								
	Neeru Bhavi Muniyappa Layout								
	BS Slab Drain								
	LHS Ch 0.00-30.00 at bottom		1	30.00	0.40		12.00		
	sides		2	30.00	0.60		36.00		
	LHS Ch 30.00-60.00 at bottom		1	30.00	0.40		12.00		
	sides		2	30.00	0.60		36.00		
	LHS Ch 60.00-90.00 at bottom		1	30.00	0.40		12.00		
	sides		2	30.00	0.60		36.00		
	LHS Ch 90.00-120.00 at bottom		1	30.00	0.40		12.00		
	sides		2	30.00	0.60		36.00		
	LHS Ch 120.00-122.00 at bottom		1	2.00	0.40		0.80		
	sides		2	2.00	0.60		2.40		
	RHS Ch 0.00-30.00 at bottom		1	30.00	0.40		12.00		
	sides		2	30.00	0.60		36.00		
	RHS Ch 30.00-60.00 at bottom		1	30.00	0.40		12.00		
	sides		2	30.00	0.60		36.00		
	RHS Ch 60.00-90.00 at bottom		1	30.00	0.40		12.00		
	sides		2	30.00	0.60		36.00		
	RHS Ch 90.00-122.00 at bottom		1	32.00	0.40		12.80		
	sides		2	32.00	0.60		38.40		

For B.V.H. [illegible] Engineer

Assistant Executive Engineer
Kodigehalli Sub Division
Bruhat Bangalore Mahanagara P[illegible]
Bangalore - 560 092

BENAKA DEVELOPERS AND PROJECTS PVT. LTD. BANGALORE

Proprietor

A.E.(W.S.)

Sl No	Description of Work	Unit	No.	L	B	D	Qty	Rate	Amount
					Total Qty Cum		390.40	699.00	272889.60
3	KSRB 4-1.2: Providing and laying in position plain cement concrete of mix 1:3:6 with OPC cement @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @ 0.892 cum and fine aggregates @ 0.465 cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2. (P.No.12, I.No.4.2 of PW,P&IWTD S.R 2016-17)								
	Measurements recorded on:								
	Culvert		1	5.00	2.00	0.15	1.50		
					Total Qty Cum		1.50	5613.00	8419.50
4	KSRB 5.2-3: Providing and constructing granite size stone masonry in foundation cement mortor 1:6, stone hammered dressed in courses not less than 20cms high, bond stones at 2m. apart in each course including cost of materaials, labour, curing complete as per specifications. Specifcation No. KBS 5.1.13. (P.No.23, I.No.5.6 of PW, P&IWTD S.R 2015-16)								
	Measurements recorded on:								
	Culvert		2	5.00	0.60	0.90	5.40		
					Total Qty Cum		5.40	4657.00	25147.8
5	KSRB 15.1.1 Providing flush pointing to square rubble, course or uncoursed stone masonry with cement mortar 1:3, 20mm deep, after raking joints to depth of 20mm nicely lining, including cost of materials, labour, curing complete as per specifications. (P.No.112, I.No.15.1 of PW, P&IWTD S.R 2015-16)								
	Measurements recorded on:								
	Culvert		2	5.00		0.90	9.00		
		Sqm			TOTAL QTY Sqm		9.00	108.00	972
6	KSRB 4-1.6: Providing and laying in position plain cement concrete of mix 1:2:4 with cement @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.878 cum and fine aggregates @ 0.459 cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation and plinth, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2. (P.No.12, I.No.4.6 of PW,P&IWTD S.R 2016-17)								
	Measurements recorded on:								
	Culvert coping		2	5.00	0.60	0.10	0.60		
					TOTAL QTY Cum		0.60	6052.00	3631.20
7	Providing and fixing RCC Precast cover slab of 250mm thick for drain in cement concrete M20 using graded granite jelly 20mm and down size with steel reinforcement, including form work, lift charges, curing and concrete finished surfaces on both sides etc, complete and as per drawing and the directions of Engineer in-charge								
	Culvert		8	1.80	0.60		8.64		
					TOTAL QTY Sqm		8.64	5580.00	48211.20
8	KSRRB M300-14. Excavation for roadwork in soil with hydraulic excavator of 0.90 cum bucket capacity including cutting and loading in tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transporting to embankment location and complete as per specifications. MORTH Specification No.301 (P.No.143, I.No.19.14 of PW,P&IWTD S.R 2016-17)								
	Measurements recorded on:								

Abstract.N.D AE(WT) 09/02/18

Abstract.N.D AE(WT) 03/2/18

Abstract.N.D AE(WT) 5/2/18

Abstract.N.D AE(WT) 06/2/18

Abstract.N.D AE(WT) 06/02/18

Abstract.N.D AE(WT) 09/02/18

For B.V.R. Developers & Engineers

Proprietor

Abstract.N.D AE(WT)

Assistant Executive Engineer
Kodigehalli Sub Division
Bruhat Bangalore Mahanagara...
Bangalore - 56...

B.V.R. DEVELOPERS AND PROJECTS PVT. LTD. BANGALORE

Sl No	Description of Work	Unit	No.	L	B	D	Qty	Rate	Amount
	Road Portion	**Cum**							
	Neeru Bhavi Muniyappa Layout								
	0-30		1	30.00	(7.4+7.3)/2	0.25	55.13		
	30-60		1	30.00	(7.3+7.1)/2	0.25	54.00		
	60-90		1	30.00	(7.1+7.3)/2	0.25	54.00		
	90-122		1	32.00	(7.3+5.9)/2	0.25	52.80		
					TOTAL QTY Cum		215.93	156.00	33684.30
9	KSRRB M 400-17, Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the Material with water at OMC in mechaniqal mix plant carriage ' of mixed Material by tipper to site, laying in uniform layers with paver in sub- base/ base course on well prepared surface and compacting with vibratory roller to achieve the desired density.complete as per specifications. MORTH Specification No. 406 (P.No.158, I.No.20.18 of PW,P&IWTD SR 2016-17)								
	Measurements recorded on:								
	Wet Mix Macadam	**Cum**							
	Neeru Bhavi Muniyappa Layout								
	0-30		1	30.00	(7.4+7.3)/2	0.20	44.10		
	30-60		1	30.00	(7.3+7.1)/2	0.20	43.20		
	60-90		1	30.00	(7.1+7.3)/2	0.20	43.20		
	90-122		1	32.00	(7.3+5.9)/2	0.20	42.24		
					TOTAL QTY Cum		172.74	1855.00	320432.70
10	KSRRB M500-6. Providing and applying **primer coat with S.S. bitumen emulsion on prepared surface of granular base** such as WBM WMM including clearing of road surface and spraying primer at the rate of 0.60 kg /sqm using mechanical means complete as per specifications.As per MORTH Specification No. 502 with all lead and lift loading and unloading and all other incidential charges etc.complete as per specification and direction of the engineer-in-charge of the work								
	Measurements recorded on:								
	Prime Coat	**Sqm**							
	Neeru Bhavi Muniyappa Layout								
	0-30		1	30.00	(7.4+7.3)/2		220.50		
	30-60		1	30.00	(7.3+7.1)/2		216.00		
	60-90		1	30.00	(7.1+7.3)/2		216.00		
	90-122		1	32.00	(7.3+5.9)/2		211.20		
					Total Qty Sqm		863.70	31.00	26774.7
11	KSRRB 500-7. Providing and applying **tack coat using 80/100 grade bitumen**(VG10) on the prepared black topped surfaces at 2.5 kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications.MORTH Chapter 5 with all lead and lift loading and unloading and all other incidential charges etc.complete as per specification and direction of the engineer-in-charge of the work								
	Measurement recorded on:								
	Tack Coat For BC	**Sqm**							
	Neeru Bhavi Muniyappa Layout								
	0-30		1	30.00	(7.4+7.3)/2		220.50		
	30-60		1	30.00	(7.3+7.1)/2		216.00		
	60-90		1	30.00	(7.1+7.3)/2		216.00		

Abstract.N.D AE(Civil) 10/02/18

Abstract.N.D AE(Civil) 19/02/18

Abstract.N.D AE(Civil) 20/02/18

For B.V.H. Consulting Engineers

Proprietor

Abstract.N.D AE(Civil)

Assistant Executive Engineer
Kodigehalli Sub Division
Bruhat Bangalore Mahanagara P
Bangalore - 560 092

BENAKA DEVELOPERS AND PROJECTS PVT. LTD. BANGALORE

Sl No	Work	Unit	No.	L	B	D	Qty	Rate	Amount
	90-122		1	32.00	(7.3+5.9)/2		211.20		
					Total Qty Sqm		863.70	13.00	11228.1
12	KSRRB M500-19. Providing and laying bituminous concrete 30-40 mm compacted thickness with VG30 Bitumen grade using 40-60 HMP using crushed aggregates of grading II, premixed with bituminous binder at 5.4% of mix and filler, transporting the hot mix to work site, laying with a mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MoRT&H specification clause No. 500.9 complete in all respects as per specifications. MORTH Specification No. 509 (P.No.165 of I.No.21.22.6 in PW,P&IWTD S.R 2016-17)								
	Measurement recorded on:								
	Bituminous Concrete	**Cum**							
	Neeru Bhavi Muniyappa Layout								
	0-30		1	30.00	(7.4+7.3)/2	0.04	8.82		
	30-60		1	30.00	(7.3+7.1)/2	0.04	8.64		
	60-90		1	30.00	(7.1+7.3)/2	0.04	8.64		
	90-122		1	32.00	(7.3+5.9)/2	0.04	8.45		
					Total Qty Cum		34.55	8438.00	291516.024
13	KSRRB M800-13. Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803.(P.No.185, I.No.24.15 of PW,P&IWTD SR 2016-17)								
	Measurement recorded on:								
	Edge line	**Sqm**							
	Neeru Bhavi Muniyappa Layout								
	0-30		2	30.00	0.10		6.00		
	30-60		2	30.00	0.10		6.00		
	60-90		2	30.00	0.10		6.00		
	90-122		2	32.00	0.10		6.40		
	Center line		20	3.00	0.10		6.00		
					Total Qty Sqm		30.40	570.00	17328
					Total Construction Cost				1099062.72

For B.V.H. Consulting Engineers

Proprietor

AE(WZ) 28/02/18

Assistant Executive Engineer
Kodigehalli Sub Division
Bruhat Bangalore Mahanagara
Bangalore - 560 092

BENAKA DEVELOPERS AND PROJECTS PVT. LTD. BANGALORE